

Hotmelt Adhesive for Gluing DVDs

by A1

Field of the Invention

This invention relates to hotmelt adhesives for bonding DVDs of sandwich construction and to a process for the production of DVDs of sandwich construction.

Background of the Invention

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- "DVD" is the abbreviation for digital versatile disc or digital video disc. These are optical storage media similar to the known CDs (compact discs). The principal difference between DVDs and CDs and other known storage media is the far higher density of the musical, graphic or data information stored in DVDs. This higher data or information density of the storage medium imposes stringent demands on the manufacturing process and the materials used therein.

- One possible structure for a DVD is schematized in Fig. 1. The DVD in question is a so-called DVD 5 which consists essentially of two halves, is one-sided and carries a layer of information; it has a storage capacity of 4.7 gigabytes. In Fig. 1, the layer which carries the information is denoted by the reference numeral "1" while the outer layer which does not carry any information is denoted by the reference numeral "2". The laser beam required to scan the information is denoted by the reference numeral "7".

- Accordingly, the construction of DVDs differs from that of the generally known CDs (compact discs) in the fact that DVDs have a sandwich construction. Whereas CDs essentially consist of a 1.2 mm thick disc of polycarbonate or poly(meth)acrylate resin, DVDs are made of two 0.6 mm thick discs for which polycarbonate is almost exclusively used today. Through a refined data structure and lasers of minimal wavelength, the information layer of a DVD can contain ca. 4.7 gigabytes of information whereas conventional CDs can only store around 640 megabytes of information.

The sandwich construction of DVDs means that the two layers 1 and

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